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IN THE

Supreme Court of the United States

OCTOBER TERM, 1973.

No. 72-1534

THE D. S. BROWN COMPANY AND
DELMONT D. BROWN,

Petitioners,

vs.

ACME HIGHWAY PRODUCTS CORPORATION,

Respondent.

PETITION FOR A WRIT OF CERTIORARI TO THE UNITED STATES COURT OF APPEALS FOR THE SIXTH CIRCUIT.

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Respondent.

PETITION FOR A WRIT OF CERTIORARI TO THE UNITED STATES COURT OF APPEALS FOR THE SIXTH CIRCUIT.

Petitioners, The D. S. Brown Company and Delmont D. Brown, pray that a writ of certiorari issue to review the judgment of the United States Court of Appeals for the Sixth Circuit entered in Appeal No. 72-1387 on February 13, 1973, which judgment reversed the judgment of the District Court and held Respondent's United States Letters Patent No. 3,179,026 to be infringed by six different forms of Petitioners' pavement and bridge joint seals under the doctrine of equivalents.

CITATIONS TO OPINIONS BELOW.

This patent litigation has been twice before the Court of Appeals for the Sixth Circuit. The first opinion, reported at 431 F. 2d 1074 (1970), reversed the decision of the United States District Court for the Northern District of Ohio, W. Div., and held the patent valid and co-petitioner Delmont D. Brown not to be a joint inventor of the patented subject matter. Upon remand, the District Court ruled six of Petitioners' pavement and bridge seals to be non-infringements. Neither opinion of the District Court has been reported. The second opinion of the Court of Appeals has been reported at 473 F. 2d 849 (1973).

JURISDICTION.

Judgment of the Court of Appeals was entered on February 13, 1973. The jurisdiction of the Supreme Court is invoked under 28 U. S. C. § 1254(1) and 28 U. S. C. § 2101(c). Original jurisdiction of the federal courts for patent infringement suits is provided in 28 U. S. C. 1338.

This petition for certiorari may be granted under Rule 19(1)(b) of the Rules of the Supreme Court. The Court of Appeals has decided an important question of federal law, *i.e.*, infringement of a United States Letters Patent under the doctrine of equivalents on grounds contrary to the rationale of this Court's last opinion on the doctrine of equivalents, *Graver Tank & Manufacturing Company, Inc. et al.* v. *Linde Air Products Company*, 339 U. S. 605, 94 L. ed. 1097 (1950). The Graver opinion was handed down more than twenty years ago in an era before the massive explosion of science and technology which has occurred in the last 10-15 years.

Attitudes of the judiciary toward patents and their place in the advancement of the useful arts and sciences have and will continue to closely scrutinize their role in today's economy and business competition. The doctrine of equivalents developed as

an equitable doctrine in favor of patentees to avoid piracy of the patented invention by use of insubstantial or unimportant substitutions or other changes. Broad principles, though perhaps applicable in the fact situation of *Graver*, have been applied by the lower federal courts with such broad strokes that the business community and the patent bar cannot reasonably predict the scope of the patent's monopoly from what has been defined as the invention in the patent claims. The latter, by statutory requirement, are to particularly point out and distinctly claim the subject matter which is regarded as the patented invention. 35 U. S. C. 112, second paragraph:

> "The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention. . . ."

QUESTIONS PRESENTED FOR REVIEW.

The important federal questions presented for review are:

1. Did the Court of Appeals err in reversing the judgment of the District Court by holding that the six accused seals of Petitioners[1] are infringements of the Respondent's patent through application of the doctrine of equivalents under a misinterpretation of the rationale of the Graver case?

2. Did the Court of Appeals err in stating that under *Graver* first the question of literal infringement must be determined (473 F. 2d 850) and thereafter conclude at 473 F. 2d 854 that "it is unnecessary to decide the question of literal infringement?"

3. Did the Court of Appeals properly apply the doctrine of equivalents against the context of the patent's disclosure and claims?

4. Did the Court of Appeals err in fact and in law in its ruling that the findings of the District Court were clearly erro-

1. Their configurations are shown in Figs. 4-9 in the appellate court's opinion in the Appendix, p. A5.

neous and that testimony on conversion of horizontal forces supports the theory of such conversion in Petitioner's seals?

STATUTES INVOLVED.

U. S. Code, Title 35, Patents[2]

The applicable sections of the Patent Code are:

"§ 112. Specification

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same, and shall set forth the best mode contemplated by the inventor of carrying out his invention.

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention. A claim may be written in independent or dependent form, and if in dependent form, it shall be construed to include all the limitations of the claim incorporated by reference into the dependent claim.

An element in a claim for a combination may be expressed as a means or step for performing a specified function without the recital of structure, material, or acts in support thereof, and such claim shall be construed to cover the corresponding structure, material, or acts described in the specification and equivalents thereof. (Amended July 24, 1965, Public Law 89-83, sec. 9, 79 Stat. 261.)"

"§ 271. Infringement of patent

(a) Except as otherwise provided in this title, whoever without authority makes, uses or sells any patented invention, within the United States during the term of the patent therefor, infringes the patent."

"§ 281. Remedy for infringement of patent

A patentee shall have remedy by civil action for infringement of his patent."

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2. Public Law 593, 82nd Cong., 2d sess.; ch. 950; 66 Stat. 792.

STATEMENT OF THE CASE.

This litigation originated in the United States District Court for the Northern District of Ohio, Western Division, as an action for patent infringement and declaratory judgment that Delmont D. Brown was not an inventor of the subject matter of the patent-in-suit. The defendants denied infringement, asserted that the patent was invalid and further, even if valid, the patent was unenforceable against the defendants because of inventorship by Brown. The District Court held the patent to be invalid and further held that the patent was unenforceable against the defendants because, on a preponderance of the evidence, the Court found Delmont D. Brown to be a co-inventor. The Court of Appeals reversed both lower court decisions.

On remand, the District Court made findings on the issue of infringement in a Supplemental Memorandum entered December 6, 1971, a copy of which appears in the Appendix hereto. The Court had before it eight accused seals, three pavement seals (Figs. 2-4 in the appended Opinion of the Court of Appeals) and five bridge seals (Figs. 5-9 of said Opinion).

The subject matter of the Respondent's patent concerns pavement seals which are mounted in a laterally compressed state in transverse joints of concrete highways. The seal is a preformed strip of low crystallization neoprene. It has planar side walls, a V-shaped top wall, a V-shaped bottom wall and internal webs consisting of a lower pair of crossed webs and an upper pair of inverted V webs defining two diamond cavities and four triangular cavities. The geometry of the seal is illustrated in Fig. 1 of said appended Opinion.

The joints into which the seal is inserted are spaces between concrete pavement slabs which expand and contract. In warm weather, as the concrete expands, the joints close. In cold weather, when the concrete contracts, the joints open. The patented sealing strips remain pressed against the opposed faces of the joints to seal out intrusion into the joints of liquids and solids, e.g., water, sand, pebbles, etc.

In May, 1961, the Respondent's President, Alfred F. Crone, filed an application for patent for the pavement seal corresponding substantially to the pavement seal covered by the patent-in-suit. This application was prosecuted before the Patent Office without success, and during the pendency of the first application, the patentee Crone filed a continuation-in-part application in June of 1964, which issued as the patent-in-suit. The continuation-in-part application had subject matter therein which was not disclosed in the first application, which was abandoned.

In 1962 and 1963, the Respondent experimented with bridge joint seals and offered for sale in the summer of 1963 both pavement joint seals similar to those of the patent-in-suit and also bridge joint seals utilizing two, side-by-side, truss-like structures like the single truss-like structure of the patent-in-suit. It is significant to note at this point that Petitioner's second application filed in June of 1964, while having added thereto new subject matter, made no reference to intent to cover by the patent-in-suit seals corresponding to the bridge joint seals which it had been offering for sale in 1963.

In the first Opinion rendered by the Court of Appeals in this litigation, 431 F. 2d 1074, the Court of Appeals in holding the patent valid characterized the patented seal as having, in cross section, a six-sided wedge shape with an unique internal configuration of neoprene ribs, which translate vertical forces on the seal into lateral forces to prevent upward or downward slippage of the seal within the joint. 431 F. 2d 1077.

This feature or attribute of vertical to horizontal translation of forces is not disclosed in Respondent's patent. The evidence on vertical to horizontal translation was introduced through cross-examination of the Defendants' expert witness.

It was the finding of the Court of Appeals in its first Opinion which lead to the District Court's conclusion that

> "The basic essential of the patent in suit is that the unique internal configuration translates vertical forces on

the seal into lateral forces to prevent upward or downward slippage of the seal within the joint."

REASONS FOR GRANTING THE WRIT.

The Court of Appeals has decided an important question of federal law in an area in which this Court has not spoken or reviewed for more than twenty years, i.e., the question of law concerned with the doctrine of equivalents as it affects judgments of infringement of claims of United States Letters Patents. The last opinion of the Supreme Court on the doctrine of equivalents, *Graver Tank & Mfg. Co.* v. *Linde Air Products Co.*, 339 U. S. 594 (1950), and the first *Graver* opinion at 336 U. S. 271, have been construed and interpreted in many subsequent decision in District Courts and Courts of Appeal both favorably and unfavorably to the patentee. Board principles stated in the *Graver* case are so flexible in interpretation that they leave the patentee's business competitors in great uncertainty as to how far a court might go in holding his competitive products to lie within the penumbra of the patent's monopoly.[3] The issue in this litigation falls in these areas of uncertainty.

Broad principles which appear in the *Graver* opinions include:

> "A patentee may invoke this doctrine to proceed against the producer of a device "if it performs substantially the same function in substantially the same way to obtain the same result.' *Sanitary Refrigeration Co.* v. *Winters,* 280 U. S. 30, 42. The theory on which it is founded is that "if two devices do the same work in substantially the same way, and accomplish substantially the same result, they are the same, even though they differ in name, form, or shape."

The situation in this litigation is hardly one of fraud on the patentee or piracy of the patented invention through minor or

3. The United States Patent Office has issued more than 1,220,000 patents since the handing down of the Graver decision.

devious changes to avoid the literal wording used in the claims. Respondent, like all patentees, has the duty to the public in general, and its competitive business community in particular, to set forth the limits of the monopoly exerted so that the public may be appraised of what may be used or manufactured outside the scope of the patent monopoly. *General Electric Co.* v. *Wabash Appliance Corp.*, 304 U. S. 364, 369 (1938); *Permutit Co.* v. *Graver Corp.*, 284 U. S. 52, 60 (1931). Nowhere in the patent has the public or the competitive business community been informed that the patent is or was intended to embrace bridge seals of any type, let alone those of such different external and internal configurations as are present in the five accused bridge seals. The patent, by the very nature of its disclosure and claims, is limited to patent coverage only as to pavement joint seals of the type described in the patent and its claims. Even your Petitioners conceded that certain of its pavement seals[4] were infringements of claims 5 and 7 of the patent.

The Court of Appeals neatly side-stepped a determination of whether there was literal infringement by deeming it to be unnecessary in view of its holding of infringement under the doctrine of equivalents. This contravenes the principle of the second *Graver* opinion that in the first instance resort must be had to the *words of the claims.* [339 U. S. 607]. Only after differences between the words of the claim and the accused structure have been assessed can a Court resolve whether the latter is within the bounds of the doctrine of equivalents.

While it is conceded that inventors and patent attorneys are not phophets in the sense of writing perfect patent claims which precisely cover all conceivable embodiments of the patented invention, and therefore that the doctrine of equivalents has merit in precluding piracy of a patented invention through inconsequential changes, the latter doctrine under principles of equity must be weighed against the patentee's duty to define his

4. Figs. 2 and 3 of the appended opinion of the Court of Appeals, p. A4.

monopoly so that others know what infringes and what is free from infringement. Here, Respondent in 1963 was selling bridge seals embodying side-by-side sets of truss structures similar to Petitioner's bridge seals.[5] If Respondent's patent is to cover such bridge seal structures, it had the duty to set this forth when it filed its second application in 1964.

There are important factors in the *Graver* case which are not found in this litigation. The patent itself disclosed the infringing substance, manganese silicate, and expert testimony indicated that the latter for all practical purposes could be substituted for the alkaline earth silicates of the flux claim held to be valid [339 U. S. 612]. On the other hand, there is nothing in Respondent's patent indicating its intent to cover seals with side-by-side truss structures nor is there any testimony or documentary evidence that the latter are or reasonably would recognize such seals as equivalents.[6]

Terms of patent claims must be construed by reading the claims in the light of the patentee's disclosure and the pertinent prior art. *Graver, supra,* at 339 U. S. 609; *U. S.* v. *Adams,* 383 U. S. 39, 49 (1966). There was no consideration given in the opinion of the Court of Appeals to the nature of the patent's disclosure or the pertinent prior art.

Further, the Court of Appeals erred ruling that the truss-like structure was the significant contribution of the patent. The patent claims are directed to a combination of top, bottom and side walls and an internal truss-like structure of diagonal webs forming triangles with the side walls. In claim 1, the side walls are defined as being substantially longer than the top and bottom walls and each triangle includes a portion of a side wall. In the arguments of the Appellant below, the contention was that the middle vertical web was a side wall and that one half or one third of each of the accused bridge seals of Figs. 5-9 of

5. Figs. 5-9 of the appended opinion of the Court of Appeals, p. A5.

6. See also *Graham* v. *John Deere Co.*, 383 U. S. 1, 25 (1966) where features not disclosed in the patent are irrelevant.

the appended Opinion (the portions in solid black lines) responded to the structure of the patent claims. The Court of Appeals rejected this approach and erroneously applied the doctrine of equivalents to each seal as a whole.

In so doing, however, the Court of Appeals erroneously looked to only one element of the combination defining the seals, i.e., the truss-like structure of diagonal webs and ignored other limitations in the patent claims as to configuration, relative lengths, etc. of the side, top and bottom walls. It has been well established by this Court that a claim for a combination covers the totality of all the elements of a combination and that there is no single essential component, gist or heart of the invention of a combination patent. *Aro Manufacturing Co. et al* v. *Convertible Top Replacement Co.*, 365 U. S. 336, 344-5 (1961).

The provisions of Title 35, United States Code, Patents, do not contain in its sections on infringement, § 271 and § 281, *supra*, the manner in which infringement is to be ascertained. However, § 112 specifies that there be claims which particularly point out and distinctly claim the invention. Where an element is to be claimed in its broadest context, this section allows the use of a means for performing a specified function. This gives the patentee a way of covering broadly the inventive member or members of a combination. Respondent's patent contains no claim defining its truss-like structure by this claiming approach. Had the truss-like structure described in the patent been the basic concept of the patent (as concluded by the Court of Appeals in the last paragraph of its opinion), the patent claims should have used the means clause approach in at least some of its claims. The fact that Respondent did not is indicative that the patent claims were granted on the basis of the overall combination of side, top and bottom walls of particular configuration and length relationship plus an internal truss-like structure of defined cross-section geometrically associated with the walls in a manner wherein *each triangle* of the seal's cross-section has as a component part a portion of one

of the side walls—a relationship not found in the bridge joint seals of Petitioners. The cross-sections of Figs. 5-9 in the appended opinion of the Court of Appeals have triangles in the center portions of the seals which do not include a side wall as a component part.

The foregoing issues and others such as the clearly erroneous ruling by the Court of Appeals will be those before the Court upon grant of this Petition. The Court of Appeals erred both in fact and in law in ruling Petitioners' pavement and bridge seals to be infringements by misinterpretation of *Graver* and the other case and statutory law cited herein.

CONCLUSION.

There is a need by the patent bar and businesses operating in our competitive economy to have a fresh review and opinion by the Supreme Court on the doctrine of equivalents and its stature in the light of the present day attitudes of the judiciary, Congress, the Department of Justice and the business community. The doctrine of equivalents creates a deterent effect upon competition with a patented article, machine, composition or process by the uncertainties of how far afield a federal court may reach to draw within the patented monopoly a competitive article, machine, etc., under the broad principles of the *Graver* case. The latter case was decided under a set of somewhat unique circumstances which are not applicable to most infringement situations. It is submitted that this case presents an ideal vehicle to review the principles for applying doctrine of equivalents under the rationale of *Graver*.

Respectfully submitted,

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APPENDIX.

No. 72-1387

UNITED STATES COURT OF APPEALS

For the Sixth Circuit

ACME HIGHWAY PRODUCTS CORPORATION,
Plaintiff-Appellant,

vs.

THE D. S. BROWN COMPANY and DELMONT D. BROWN,
Defendants-Appellees.

Appeal from the United States District Court for the Northern District of Ohio, Western Division.

Decided and Filed February 13, 1973.

Before: EDWARDS, CELEBREZZE and MILLER, *Circuit Judges.*

CELEBREZZE, *Circuit Judge.* This is an appeal from an order of the District Court for the Northern District of Ohio, Western Division, finding that two of Appellees' seals infringed on Appellant's patent, Patent No. 3,179,026, and that six others did not infringe. Appellant appeals from that portion of the order finding that some of the seals do not infringe on the patent.

This Court has previously determined that Appellant Acme's patent for a seal for highway joints is valid and has ruled against a claim of joint inventorship by Appellee. 431 F. 2d 1074 (6th Cir. 1970). The background of the case can be found in that opinion.

On remand, the District Court stated in its original memorandum that the only remaining issue to be settled was the amount of damages. In its Supplemental Memorandum, the District Court stated that a considerable dispute existed as to which of Defendant-Appellee's products were infringing on Appellant's patent. The Court found that of the eight accused patents—three pavement seals and five bridge seals—two infringed on the patent and six did not infringe. The District Court found that

> "The basic essential of the patent in suit is that the unique internal configuration translates vertical forces on the seal into lateral forces to prevent upward or downward slippage of the seal within the joint."

In determining whether a patent has been infringed by an accused device, two tests must be applied. The first determination to be made is whether there is literal infringement of the patent. In making this determination, the words of the claim in the patent must be compared with the accused device. If the accused device is clearly within the claim, then infringement does exist. *Graver Mfg. Co.* v. *Linde Co.*, 339 U. S. 605 (1950).

The second test is the application of the doctrine of equivalents. The Supreme Court explained this doctrine in *Graver, supra*:

> "A patentee may invoke this doctrine to proceed against the producer of a device 'if it performs substantially the same function in substantially the same way to obtain the same result.' *Sanitary Refrigeration Co.* v. *Winters*, 280 U. S. 30, 42. The theory on which it is founded is that 'if two devices do the same work in substantially the same way, and accomplish substantially the same result, they are the same, even though they differ in name, form, or shape.' *Machine Co.* v. *Murphy*, 97 U. S. 120, 125. The doctrine operates not only in favor of the patentee of a pioneer or primary invention, but also for the patentee of a secondary invention consisting of a combination of old ingredients which produce new and useful results, *Imhaeuser* v. *Buerk*, 101 U. S. 647, 655, although the area of equivalence may vary under the circumstances. [Citations omitted] The

wholesome realism of this doctrine is not always applied in favor of a patentee but is sometimes used against him. Thus, where a device is so far changed in principle from a patented article that it performs the same or a similar function in a substantially different way, but nevertheless falls within the literal words of the claim, the doctrine of equivalents may be used to restrict the claim and defeat the patentee's action for infringement. *Westinghouse* v. *Boyden Power Brake Co.*, 170 U. S. 537, 568." 339 U. S. at 608-9.

Appellant Acme contends that the claims made in its patent read directly on the accused seals. *See American Technical Machine Corp.* v. *Caparotta*, 339 F. 2d 557 (2d Cir. 1964). Acme refers specifically to infringement of claim 1 of its patent which provides:

"A sealing strip for joints comprising:

(a) an elongated hollow body of low crystallization elastomeric material having two thin side walls, a top wall, and a bottom wall;

(b) each of said side walls being substantially flat, equal in length, and substantially longer than said bottom and top walls;

(c) said hollow body having an internal truss structure connected to said side walls so that a strong support is provided thereby to oppose lateral deformation of said walls; and

(d) said truss structure having diagonal rib members which are interconnected and have spaces therebetween which will permit said rib members to collapse into said spaces when said side walls are laterally compressed; and

(e) said rib members forming a plurality of connected triangular sections, one of the members of each of said triangular sections being a portion of said side walls."

The other claims of the patent are set forth in the margin.[1]

[1] 2. The sealing strip for joints as set forth in claim 1 wherein said top wall comprises two downwardly inclined straight wall sections which meet and are joined at their lower ends to form a central apex, said sections each being thicker than said rib members, and at their upper ends meeting and joining their corresponding

A cross-section of Acme's patented seal is shown below in Figure 1. Figures 2 and 3 are cross-sections of seals admitted by Appellee to be infringing on the patent.

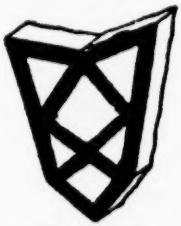

Figure 1

Figure 2

Figure 3

Acme Seal
Patent No. 3,179,026

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side walls to form a point, so that said straight wall sections will deflect downwardly with minimum upward bulge when said side walls are compressed laterally.

3. The sealing strip for joints as set forth in claim 1 wherein said bottom wall comprises two downwardly inclined wall sections which meet and are joined at their lower ends to form a central apex, and are connected at their upper ends to their respective side walls, so that the sealing strip can more readily be fitted into a joint.

4. The sealing strip for joints as set forth in claim 1, wherein said material is neoprene synthetic rubber.

5. A sealing strip for joints comprising:

(*a*) an elongated hollow thin-walled body of low crystallization elastomeric material having side walls, a bottom wall, and a top wall,

(*b*) a pair of diagonal support ribs disposed within said body and which converge and join at their upper end with a central point of said top wall, each of said ribs at their lower ends being integral with one of said side walls adjacent to the center portion thereof;

(*c*) a second pair of diagonal support ribs disposed within said body which cross and are integral with each other at approximately their mid-point, and are each integral at their upper end with the central portion of one of said walls, and each such diagonal support rib being integral at its lower end with the other said side walls adjacent the lower end thereof; and

Cross-sections of the accused seals involved in this appeal are shown in Figures 4 through 9.

Figure 4

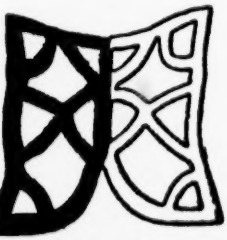

Figure 5

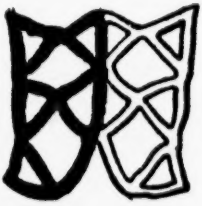

Figure 6

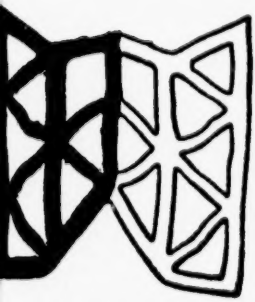

Figure 7

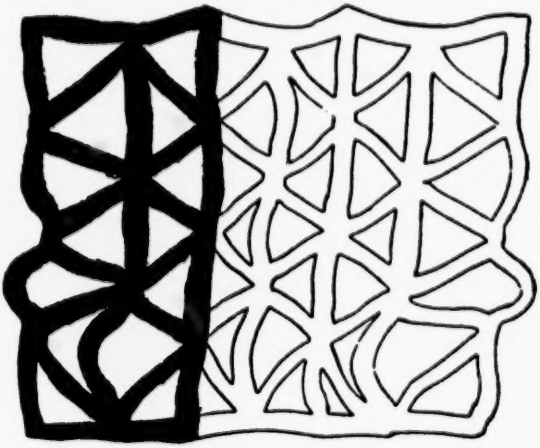

Figure 8

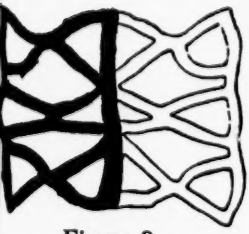

Figure 9

(*d*) said crossed diagonal support members each making an angle of at least 30 degrees with said walls.

6. The sealing strip for joints as set forth in claim 5 wherein said top wall comprises two downwardly inclined straight wall sections which meet and are joined at their lower ends at a central apex,

Appellee contends that the accused seals do not infringe on Claim 1 of the patent because the patented seal and the accused seals differ significantly in several respects:

(a) Each of the side walls of the seals is not *substantially longer* than the top and bottom walls. In all cases the

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each of said straight wall sections being thicker than said diagonal support ribs, and at their upper ends meeting their corresponding side wall at a point so that straight wall sections will deflect downwardly with minimum upward bulge when said side walls are compressed.

7. The sealing strip as set forth in claim 5 wherein said bottom wall comprises two downwardly inclined sections which meet and are joined at their lower ends at a central apex and are connected at their upper ends to their respective side walls, so that the sealing strip is more readily fitted into a joint.

8. A sealing strip for joints comprising:

(*a*) an elongated hollow thin-walled body of low crystallization elastomeric materials having side walls, a bottom wall and a top wall, said side walls being substantially flat;

(*b*) a pair of diagonal support ribs disposed within said body and which converge and are joined at their upper end with a central point of said top wall, each of said ribs at their lower ends being integral with one of said side walls adjacent the center portion thereof;

(*c*) a second pair of diagonal support ribs disposed within said body which cross and are integral with each other at approximately their mid point, and are each integral at their upper end with the central portion of one of said side walls, and each such diagonal support rib being integral at its lower end with the other of said side walls adjacent the lower end thereof;

(*d*) said crossed diagonal support members each making an angle of at least 30 degrees with said walls;

(e) said top wall comprising two downwardly inclined straight wall sections which meet and are joined at their lower ends at a central apex, said sections each being thicker than said diagonal support members, and at their upper ends meeting their corresponding side wall to form a point so that said straight wall sections will deflect downwardly with minimum upward bulge when said side walls are compressed; and

(*f*) said bottom wall comprising two inclined sections which meet and are joined at their lower ends and are connected at their upper ends to their respective side walls, so that the sealing strip is more readily fitted into a joint.

side walls are *shorter* than or about the *same* as the top and bottom walls.

(b) *Thin* side walls are defined indefinitely in the patent. The side walls of Figures 5, 7 and 9 are thick, not thin.

(e) The side walls of Figures 5, 6, 8 and 9 are not *substantially flat.*

(d) The diagonal rib members do not form a plurality of connected triangular sections with one member of *each* triangular section being a portion of the side *wall.*

(e) The sections forming the top wall of Figure 6 and Figure 9 are not thicker than the rib members.

(f) The top walls of Figures 5, 6 and 8 have an arcuate configuration rather than two downwardly inclined *straight* wall sections.

Similar contentions are made regarding the other claims of the patent.

The District Court found that none of the six accused seals come within the literal description of the patent. The Court then considered whether there was infringement under the doctrine of equivalents:

> "Plaintiff claims that the other seals, although markedly different in form from the patented seal, are nevertheless, under the doctrine of equivalents, to be considered as infringing. When closely scrutinized, however, plaintiff's contentions in this respect seem to be that since the other seals serve the same purpose, utilize the same or similar material, and bear some superficial resemblance in appearance to the patented seal, they are equivalent to it.
>
> "However, it is too clear to require citation of authority that an inventor may not patent a function, and basically, that is what the plaintiff's claims amount to, particularly with respect to the bridge seals, represented by Exhibits 36, 37, 52, 53, and 54." [Figures, 5, 6, 7, 8, and 9.]

We do not find this to be a correct statement of the law. In determining whether equivalence exists in an accused device, a court must not emphasize form over substance. *Graver Tank &*

Mfg. Co. v. *Linde Air Products Co.*, 339 U. S. 594 (1950); *Laitram Corp.* v. *Deepsouth Packing Co.*, 443 F. 2d 928, 933 (5th Cir. 1971. "If two devices do the same work in substantially the same way, and accomplish substantially the same result, they are the same, even though they differ in name, form or shape." *Graver, supra,* at 608; *Machine Co.* v. *Murphy,* 97 U. S. 120, 125 (1877). We find that the District Court incorrectly applied the doctrine of equivalents to Appellant's patent. The Supreme Court in *Graver* went on to say:

> "What constitutes equivalency must be determined against the context of the patent, the prior art, and the particular circumstances of the case. Equivalence, in the patent law, is not the prisoner of a formula and is not an absolute to be considered in a vacuum. It does not require complete identity for every purpose and in every respect. In determining equivalents, things equal to the same thing may not be equal to each other and, by the same token, things for most purposes different may sometimes be equivalents. Consideration must be given to the purpose for which an ingredient is used in a patent, the qualities it has when combined with the other ingredients, and the function which it is intended to perform. An important factor is whether persons reasonably skilled in the art would have known of the interchangeability of an ingredient not contained in the patent with one that was." 339 U. S. at 609.

We hold that the accused seals do, under the doctrine of equivalents, infringe on Acme's patent. We therefore find it unnecessary to decide the question of literal infringement. While the Supreme Court has stated that a finding of equivalence is a determination of fact, *Graver, supra,* 339 U. S. at 609, where mixed questions of law and fact are presented and there is error as to the law, we may reverse the District Court free of the clearly erroneous rule. *Up-Right, Inc.* v. *Safway Products, Inc.*, 315 F. 2d 23 (5th Cir. 1963). However, a review of the factual determinations of the District Court makes this approach unnecessary.

The findings of the District Court were:

> "Plaintiff contends that these seals are essentially two or three of the patented seals joined firmly together. Even if it be conceded that this were literally true, which it is not, it is quite apparent from examining the exhibits, and from the expert testimony concerning them, that with respect to the conversion of vertical forces into lateral forces by the internal construction of the seals, which is what the patent covers, this would not happen when two seals are fastened together as it would with one single seal. Moreover, it is very clear that, as the defendant contends, the bridge seals represented by Exhibits 36, 37, 52, 53, and 54 [Figures 5, 6, 7, 8, and 9], do not function by converting vertical into lateral forces. The lateral forces are produced entirely by the structure of the seals, and the vertical forces are merely absorbed and released by this same structure."

The testimony in the record does not support this finding. Indeed, the testimony on this point supports the theory of vertical to horizontal translation of forces. We hold, therefore, that the determination that the accused seals do not function by converting vertical forces into lateral forces is clearly erroneous.

An inventor is entitled to a range of equivalents commensurate with the scope of his invention. *Up-Right, Inc.* v. *Safway Products, Inc., supra; Southern Saw Service* v. *Pittsburgh-Erie Saw Corp.*, 239 F. 2d 339 (5th Cir. 1956). Appellee contends that previous patents have disclosed hollow elastomer seals for paving joints and that the Acme seal is merely an improvement over these seals and must be given a narrow range of equivalents. A review of the prior art of the industry indicates, however, that the patent in this case represented a significant improvement over the prior art and, as noted in our previous opinion on this case, the District Court described its initial success as "an accomplishment hitherto unheard of." 431 F. 2d at 1077. The invention is, therefore, entitled to a liberal range of equivalents. *Up-Right, Inc.* v. *Safway Products, Inc., supra; Southern*

Saw Service v. *Pittsburgh-Erie Saw Corp., supra; Royal-McBee Corp.* v. *Smith-Corona Marchant, Inc.*, 295 F. 2d 1 (2d Cir. 1961); *Nelson* v. *Batson*, 322 F. 2d 132 (9th Cir. 1963). Accordingly, we find that there is substantial identity between the teachings of Appellant's patent and the accused seals in structure, mode of operation and result to be accomplished. *Graver Tank & Mfg. Co.* v. *Linde Air Products Co., supra. See Rothstein* v. *Atlanta Paper Co.*, 321 F. 2d 90 (5th Cir. 1963); *Royal McBee* v. *Smith Corona Marchant, Inc., supra.*

Appellee also contends that the means used to achieve the sealing of the joints is substantially different from the patented seal. A reading of the patented claims, however, indicates that the significant improvement of achieved results from the unique internal configuration of neoprene ribs. This truss-like structure is the basis of the patented seal. To say that Appellant's patent is limited only to the exact configuration shown in the patent and described in the claim would afford little protection for the invention and render it a "hollow and useless thing." *Graver Tank & Mfg. Co., Inc.* v. *Linde Air Products Co.*, 339 U. S. at 607. *See Nelson* v. *Batson, supra*, 322 F. 2d at 135. An accused device cannot escape infringement by merely adding features, if it otherwise has adopted the basic features of the patent. *Aluminum Co. of America* v. *Sperry Products, Inc.*, 285 F. 2d 911 (6th Cir. 1960). While the accused seals may offer some improvement over the design of the patented seal, they all utilize the truss-like structure, the basic concept of the patent. We find that the essence of the accused seals is the truss-like structure which is the significant contribution made by Appellant's patent. We hold, therefore, that the six accused seals do infringe on Appellant's patent. The judgment of the District Court is reversed and the case is remanded to the District Court for proceedings consistent with this opinion.

IN THE UNITED STATES DISTRICT COURT

For the Northern District of Ohio

Western Division

ACME HIGHWAY PRODUCTS CORPORATION,
Plaintiff,
vs.
THE D. S. BROWN COMPANY and DELMONT D. BROWN,
Defendants.
} Civil No. C-66-89

MEMORANDUM

YOUNG, *J:*

This matter is before the Court on several motions of the defendants, all of which relate to defendants' contentions that the Court has before it for determination not only the issue of damages but also issues relating to the validity and infringement of the patent in suit.

This matter was originally decided by this Court, and a written opinion filed on June 6, 1969, serving as the Court's findings of fact and conclusions of law. The Court found in favor of the defendants as to plaintiff's claims, and in favor of the plaintiff as to defendants' claims.

All parties appealed to the Court of Appeals, which on September 24, 1970, rendered a decision reversing the judgment of this Court and remanding the matter for proceedings consistent with its opinion.

The defendants' motions are based on their view that these proceedings involve substantially all of the same issues which were originally before the Court, principally the issue of the validity of the patent in suit. Their contention seems to be that the Court of Appeals only held that the patent in suit

dated back to the filing of the plaintiff's earlier patent application, so that the patent in suit was not invalid because of the public use of the device for more than one year prior to the filing of the application.

Consequently, say the defendants, the remand requires more than just a trial of the issue of damages, and the whole question of validity and infringement must be tried in the light of developments subsequent to the previous trial.

This Court is unable to read the opinion and mandate of the Court of Appeals so narrowly as the defendants do. 431 F. 2d 1074 (6th Cir. 1970).

On page 14 of its opinion, 431 F. 2d at 1082, the Court of Appeals says.

> Upon review of the record in its entirety, we find that all claims of the Crone patent are valid . . .

It is true that in footnote 1 on page 4 of the opinion, 431 F. 2d at 1077, it is said:

> The novelty, utility, and obviousness of the Crone device are not raised as issues on this appeal; the District Court made no findings with respect to them.

This footnote statement seems to be contradicted by the statement on page 3 of the opinion that:

> All experts who testified in the District Court acclaimed the device as a significant improvement over the prior art, and the District Court described its introduction as 'an accomplishment hitherto unheard of.' 431 F. 2d at 1077.

This statement, taken in the context of the opinions of both this Court and the Court of Appeals makes it quite clear that the defendants, by their motions, are trying to revive and relitigate issues that have been decided. The only issue remaining for the consideration of this Court upon the remand is the issue of damages.

The motions of the defendant will be overruled. Counsel for plaintiff may draft and submit an order expressive of these conclusions.

Counsel should suggest to the Court how much time they think will be required to try the issue of damages, and the Court will then undertake to set a trial date as soon as possible.

/s/ WM. J. YOUNG,
United States District Judge.

Toledo, Ohio.

IN THE UNITED STATES DISTRICT COURT

For the Northern District of Ohio

Western Division

ACME HIGHWAY PRODUCTS CORPORATION,
Plaintiff,

vs.

THE D. S. BROWN COMPANY and DELMONT D. BROWN,
Defendants.

Civil No. C 66-89

SUPPLEMENTAL MEMORANDUM

YOUNG, *J:*

In its memorandum filed September 20, 1971, this Court held that the original decision of this Court and the decision of the Court of Appeals had determined the issues of the validity and infringement of the patent in suit, and that the only issue remaining was that of damages.

At the pretrial conference held thereafter, and in briefs filed by the parties concerning the form of the order to be entered expressive of this Court's ruling, it became apparent that there is a considerable dispute as to exactly which of the defendants' products infringe the plaintiff's patents.

Plaintiff contends that the pavement seals represented by Exhibits 38, 39, and 40, and the bridge or multiple seals represented by Exhibits 36, 37, 52, 53, and 54, manufactured and sold by the defendants, all infringe the patent in suit. The defendants admit that the pavement seals represented by Exhibits 38 and 40 do infringe, but deny that pavement seal Exhibit 39 or any of the bridge seals infringe.

This Court has a retentive memory, and has refreshed it by reviewing the evidence which was adduced at the trial of the case.

The basic essential of the patent in suit is that the unique internal configuration translates vertical forces on the seal into lateral forces to prevent upward or downward slippage of the seal within the joint.

Basically, only the pavement seals represented by Exhibits 38 and 40 come within the literal description of the patent in suit. Plaintiff claims that the other seals, although markedly different in form from the patented seal, are nevertheless, under the doctrine of equivalents, to be considered as infringing. When closely scrutinized, however, plaintiff's contentions in this respect seem to be that since the other seals serve the same purpose, utilize the same or similar material, and bear some superficial resemblance in appearance to the patented seal, they are equivalent to it.

However, it is too clear to require citation of authority that an inventor may not patent a function, and basically, that is what the plaintiff's claims amount to, particularly with respect to the bridge seals, represented by Exhibits 36, 37, 52, 53, and 54. Plaintiff contends that these seals are essentially two or three of the patented seals joined firmly together. Even if it be conceded that this were literally true, which it is not, it is quite apparent from examining the exhibits, and from the expert testimony concerning them, that with respect to the conversion of vertical forces into lateral forces by the internal construction of the seals, which is what the patent covers, this would not happen when two seals are fastened together as it would with one single seal. Moreover, it is very clear that, as the defendant contends, the bridge seals represented by Exhibits 36, 37, 52, 53 and 54, do not function by converting vertical into lateral forces. The lateral forces are produced entirely by the structure of the

seals, and the vertical forces are merely absorbed and released by this same structure.

This is true also of the pavement seal represented by Exhibit 39. It does not have either the exterior or interior construction of the patent in suit, and appears to function as do the bridge seals, without any conversion of vertical to lateral forces, the latter forces being supplied by the form and structure of the seal, which also serve to absorb and release the vertical forces.

An order will therefore be entered finding that the pavement seals represented by Exhibits 38 and 40 are the only infringing items, and the issue of damages will be tried as to these two items only.

/s/ WM. J. YOUNG,
United States District Judge.

Toledo, Ohio.